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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,328	07/02/2001	Masaakira Horino	010830	6708

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ARMSTRONG, WESTERMAN & HATTORI, LLP  
1725 K STREET, NW.  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

OSTRUP, CLINTON T

ART UNIT	PAPER NUMBER
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1614

DATE MAILED: 07/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/895,328

Applicant(s)

HORINO, MASA AKIRA

Examiner

Clinton Ostrup

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

Claims 1-14 are pending in this application.

### ***Specification***

The abstract of the disclosure is objected to because it does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

### ***Claim Objections***

Claim 5 is objected to because of the following informalities: the parenthesis in line 8 is unnecessary and if the term "materials" is read with another "s" it would be idiomatic English and confusing. Appropriate correction is required wherein the "(s)", is deleted.

Claim 9 is objected to because it depends from a previously cancelled claim. Appropriate correction is required.

## **Response to Applicant's Arguments/Amendment**

Applicants arguments and amendment to claims 10 and 13 do not make the previous 35 U.S.C. 112, second paragraph rejection moot and therefore, the said rejection has been MAINTAINED for the reasons set forth in the Office Action mailed January 15, 2002, Paper No. 4, and those found below.

Claim 10 is vague and indefinite because it is unclear what the percentages as claimed are based upon. The claim gives percentage amounts of hydroxyapatite and zinc oxide based on the total weight of the substance, including hydroxyapatite and zinc oxide. It is unclear if the percentages are based on the total weight of the substance or

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the total weight of both hydroxyapatite and zinc oxide. Because claim 2 clearly provides antecedent basis for a "substance" it is not clear from the instant claim terminology what the weight percentages are based upon. For examination purposes the examiner read the claim as "The powder as defined in claim 2, wherein said powder comprises 2 to 50 wt% of hydroxyapatite and 2 to 8 wt% of zinc oxide based on the total weight of the powder.

Claim 13 is confusing because both hydroxyapatite and zinc oxide are known sebum-absorbing agents, thus reading claim 13 as broadly as possible, this claim fails to further limit the subject matter of the claims from which it depends. However, the examiner read the claim as "A sebum-absorbing composition comprising the powder as defined in claim 2 or 4".

Applicant's arguments filed April 15, 2002, Paper No. 5, to the rejection of claim 2-14 under 35 U.S.C. 103(a) have been fully considered, however the arguments are not deemed persuasive and the said rejection has been **MAINTAINED** for the reasons set forth in the Office Action mailed January 15, 2002, Paper No. 4, and those found below.

Applicants argue that claim 2 requires that the hydroxyapatite be layered directly on the core powder, and that the zinc be layered directly on the hydroxyapatite and therefore, Nakane et al., cannot anticipate claim 2 and claims dependent therefrom. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the hydroxyapatite be layered directly on the core powder, and that the zinc be layered

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directly on the hydroxyapatite) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Instant claim 2 only requires a powder composition comprising a base substance, hydroxyapatite coated on the surface of said substance, and a zinc oxide fixed to the coating layer of hydroxyapatite. This claim does not require that the hydroxyapatite be layered directly on the core powder and that the zinc be directly layered on the hydroxyapatite. In fact, the zinc could be on the inside of the powdered composition which is then layered with hydroxyapatite and then layered with a base substance. Moreover, reading this claim as broadly as possible, this claim reads on a dispersion of a base powder and zinc bound hydroxyapatite, wherein the individual compounds are in contact with one another. Therefore, applicants' arguments are not commensurate with the claims and are not convincing to the examiner.

Furthermore, Nakane et al., teach a deodorant composition wherein the resin powder preferably comprises hydroxyapatite, zinc oxide, and aluminum hydroxychloride. See: col. 11, lines 18-30. Nakane et al., teach the resin powder as being the core powder and being substantially covered with hydroxyapatite. The reference then teaches that the resin powder is covered with zinc oxide because of its inherent characteristics of being an astringent and anti-inflammatory agent activities. Nakane teaches the composite powder having an average particle size of 1 to 100 microns and zinc oxide having an average particle size of 0.01 to 1 microns, thus

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teaching the zinc oxide and powder sizes of instant claim 9. See: col. 7, line 25 – col. 10, line 44.

Applicants traverse the combination of Peterson et al., with Nakane et al., however, the traversal is unresponsive because applicants argue what is lacking in Nakane et al. Applicants argue the claimed invention as a “powder comprising a core powder with hydroxyapatite layered directly on the core powder, and that the zinc layered directly on the hydroxyapatite”, which is not commensurate with what is being claimed.

Therefore, applicants arguments are not convincing and as discussed Paper No. 4, it would have been obvious to one having ordinary skill in the art to have modified the skin treatment powders of Nakane by coating powders with other shapes such as, the platelet shaped particles of Peterson, because of the expectation of obtaining a skin care agent capable of adsorbing moisture with powder carriers which are particularly formulated to provide good skin feel.

### ***Claim Rejections - 35 USC § 112***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 8, 10, 11, and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 is vague and indefinite because it appears to be an incomplete sentence. It is unclear how “said substance” can contain “a scale shape, a plate shape

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or a bar shape.” For examination purposes the claim was read as “The powder as defined in claim 2, wherein the said substance is in the shape of a scale, a plate, or a bar.” Appropriate correction is required to make the claim understandable, as the instant claim does not make sense grammatically.

Claim 10 is vague and indefinite because it is unclear what the percentages as claimed are based upon. The claim gives percentage amounts of hydroxyapatite and zinc oxide based on the total weight of the substance, including hydroxyapatite and zinc oxide. It is unclear if the percentages are based on the total weight of the substance or the total weight of both hydroxyapatite and zinc oxide. Because claim 2 clearly provides antecedent basis for a “substance” it is not clear from the instant claim terminology what the weight percentages are based upon. For examination purposes the examiner read the claim as “The powder as defined in claim 2, wherein said powder comprises 2 to 50 wt% of hydroxyapatite and 2 to 8 wt% of zinc oxide based on the total weight of the powder.

Claim 11 is confusing because it does not follow Standard English format. “A” is used when describing something as singular, however, the instant claims uses the phraseology “A cosmetics”. This does not make sense. For examination purposes the examiner read the claim as “A cosmetic composition comprising the powder as defined in any one of claims 2 to 4.”

Claim 13 is confusing because both hydroxyapatite and zinc oxide are known sebum-absorbing agents, thus reading claim 13 as broadly as possible, this claim fails to further limit the subject matter of the claims from which it depends. However, the

examiner read the claim as "A sebum-absorbing composition comprising the powder as defined in claim 2 or 4".

Claim 14 is confusing because both hydroxyapatite and zinc oxide are known body deodorants, thus reading claim 14 as broadly as possible this claim fails to further limit the subject matter of the claims from which it depends. However, the examiner read the claim as "A body deodorant composition comprising the powder as defined in claim 2 or 4" for examination purposes.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. **5,122,418** (Nakane) as applied to claims 2-6 and 9-14 above, and further in view of Peterson et al., **6,004,584** (Peterson).

Nakane discloses a composite powder wherein the core powder is covered with one or more powders wherein said composite powder could be used as a skin treatment agent or in sunburn preventing cosmetics, and deodorants. See: col.4, line 51- col. 6, line 11; claims 1-5 and abstract.

Nakane teaches the composite powder having an average particle size of 1 to 100 microns and zinc oxide having an average particle size of 0.01 to 1 microns, thus teaching the zinc oxide and powder sizes of instant claim 9. See: col. 7, line 25 – col. 10, line 44. The reference further teaches that a preferred deodorant composite powder contains a resin powder and hydroxyapatite, zinc oxide, and aluminum hydroxychloride



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and any other known component such as talc, bentonite, mica, etc., thus meeting the limitations of instant claims 1-2 and 5-6. See: col. 11, line 9 – col. 12, line 25.

The reference teaches that the skin treatment agent of their invention has a superior feel, adsorbs the decomposed sebum and maintains the skin in its normal state, thus teaching instant claim 13. See: col. 12, line 26 - col. 13, line 35.

Nakane teaches skin care agents and cosmetics comprising a composite powder covered by hydroxyapatite and zinc oxide as discussed above. Nakane teaches that a spherical particle includes deformed particles. See: col. 1, lines 14-44. However, the primary reference lacks the crystalline size and shape of instant claims 7-8.

Peterson teaches compositions for moisture adsorption comprising spherical particles as well as platelet-shaped particles. See: col. 1, line 5 – col. 2, line 34 and abstract. The reference teaches that the powder carriers of their invention provide good skin feel characteristics and are used where increased levels of moisture absorbers are included in body powders. See: col. 2, line 40 – col. 4, line 11. The secondary reference teaches that zinc oxide is preferably added to the composition as an antimicrobial agent and that mica, talc, etc., are the platelet shaped particles useful in their invention. See: col. 4, lines 35 – 68 and col. 5, line 43 – col. 6, line 4.

It would have been obvious to one having ordinary skill in the art to have modified the skin treatment powders of Nakane by coating powders with other shapes such as, the platelet shaped particles of Peterson, because of the expectation of obtaining a skin care agent capable of adsorbing moisture with powder carriers which are particularly formulated to provide good skin feel.

Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. **5,122,418** (Nakane) as applied to claims 2-6 and 9-14 above, and further in view of Kaji et al., JP 11-140819.

Nakane teaches skin care agents and cosmetics comprising a composite powder covered by hydroxyapatite and zinc oxide as discussed above. Nakane teaches that a spherical particle includes deformed particles. See: col. 1, lines 14-44. However, the primary reference lacks the crystalline size and shape of instant claims 7-8.

Kaji et al., teach cosmetic compositions comprising a tabular shaped hydroxyapatite and zinc oxide in a powdered form. See: Examples, pages 1-4. The Kaji et al., reference teaches tabular hydroxyapatite is better than spherical hydroxyapatite because, for examples, it adheres and spreads better on the skin. See: Abstract, Prior art, and Effect of Invention. Kaji et al., teach hydroxyapatite as being mixed and covered with various organic and inorganic compounds, which use the hydroxyapatite as a nucleus and then form a covering or surface treatment on the hydroxyapatite. See: Means, pages 1-3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the resin treated hydroxyapatite cosmetic powders of Nakane et al., by using the tabular shaped hydroxyapatite and covering the hydroxyapatite powders as taught by Kaji et al., to form powders comprising resins substantially covered with tabular hydroxyapatite and then said tabular hydroxyapatite being covered by zinc oxide to deliver powdered compositions with better spread and adhesion.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clinton Ostrup whose telephone number is (703) 308-3627. The examiner can normally be reached on M-F (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel can be reached on (703) 308-4725. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 for regular communications and (703) 308-4556 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Clinton Ostrup  
Examiner  
Art Unit 1614



June 27, 2002

FREDERICK KRASS  
PRIMARY EXAMINER  
GROUP 1600

